

# Atlantic Richfield Company

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## **CERTIFIED – RETURN RECEIPT REQUESTED**

Ms. Nadia Hollan Burke  
Remedial Project Manager  
U.S. Environmental Protection Agency Region 9  
75 Hawthorne Street, SFD-8-2  
San Francisco, CA 94105

**Subject: November 2008 Monthly Report, Yerington Mine Site, Lyon County, Nevada:  
Administrative Order for Remedial Investigation and Feasibility Study, EPA Docket  
No. 9-2007-0005**

Dear Ms. Hollan Burke:

Pursuant to the above referenced order issued by the U.S. Environmental Protection Agency – Region 9 (EPA), please note the following monthly status report for Atlantic Richfield Company (ARC) activities at the Yerington Mine Site (Site) during November 2008.

### **November 2008 Activities**

- Continued routine site O&M, security and bird deterrent activities.
- Primary access roads were graded and the overlook road berm was re-built November 3-6.
- Pumpback well system (PWS) averaged approximately 53 gpm. All 11 wells operated 24/7 with minor downtime for preventive maintenance (PW-4, PW-5, PW-7, and PW-10). PWS evaporation pond levels: north cell = 1.5 feet; middle cell = 1.0 feet; south cell = 0.43 feet. Minor repairs to the south cell HDPE liner was completed November 12.
- Arimetco heap leach fluid management system (FMS): 1) Total estimated gallons transferred from VLTSP Pond to Evaporation Pond = 33,000 gallons; SSP to Evaporation Pond = 121,500 gallons; Phase 1 Pond to Evaporation Pond = 0 gallons; 2) Levels for the Phase 1 Pond = 0.5 feet, Evaporation Pond = 4.75 feet, VLT Pond = 6.5 feet, and the Slot 2 Pond = 13.75 feet.

### Other Site Activities

- Joe Sawyer (NDEP) FMS inspection November 20.
- Quatterra rock core loggers on Site all month.
- Quatterra representatives conducted a tour of the Site on November 20.

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## **November 2008 Activities - Continued**

### Site Characterization

- Site-wide monthly groundwater elevation measurements were obtained on November 18 and 19.
- A pit lake elevation of 4,216.14 feet above mean sea level (amsl) was recorded on November 26 (surveyed posts installed along the south ramp of the pit indicated an approximate water level of 4,216.1 feet amsl). This level represents an increase of 0.30 feet since October 13 (4,215.84 feet amsl) when the pressure transducer was reinstalled following removal and repair.
- 4Q 2008 groundwater monitoring was conducted November 2-13. All but two active monitor wells were sampled for water quality analysis: 1) MW-1S was not sampled because the well pumping equipment has become damaged and unusable and the well casing appears to be partially obstructed (this well has since been approved for removal from the active monitor well list by EPA, see below); and 2) USEPA-2S was not sampled because of a lack of adequate volume of standing water in the well due to a lowered water table and/or sedimentation that filled the well bottom. A number of shallow wells around the agricultural fields, which had been dry during the 2Q 2008 event, had recovered sufficiently to allow water quality sampling.
- Continued data compilation for the 3Q 2008 Groundwater Monitoring Report.
- Received a letter from EPA dated November 17, 2008 responding to ARC's request to: 1) eliminate MW-1S from the Site-wide groundwater monitoring network; and 2) perform laboratory analysis for orthophosphate instead of total phosphorus. EPA concurred with both of these suggested modifications to the groundwater monitoring program.
- Discussions were held with EPA regarding the bottled water program for domestic well owners located in the vicinity of the Site who are eligible for the program.
- Provided EPA with review comments on November 4, 2008 for the Anaconda Mine Radiation Assessment Letter Report (START Report) dated August 15, 2008.
- Provided EPA with ARC's approach to the characterization of radiological materials located in the Process Areas of the Site in a letter dated November 4, 2008.
- Submitted a revised version of the Quality Assurance Project Plan (QAPP) for the Site to EPA for final review.
- Reviewed a draft version of the Administrative Order on Consent (AOC) and attached Scope of Work (SOW) for short-term response actions at the Site.
- Initiated the compilation and interpretation of field information and laboratory analytical data associated with the Anaconda Evaporation Ponds Removal Action Characterization Work Plan.
- Based on an audit conducted on the environmental data base for the Site, it was discovered that the metal concentrations reported for the soil samples collected as part of the background soils study were not corrected for soil moisture values. ARC notified EPA on November 26, 2008 of this situation.
- Attended a groundwater technical meeting held on November 18 and 19 to discuss: 1) the results presented in the Second-Step Hydrologic Framework Assessment Data Summary Report (HFA DSR); and 2) subsequent phases of groundwater investigations to be performed pursuant to a revised Site-Wide Groundwater RI Work Plan.
- Pursuant to the groundwater technical meeting, initiated the development of the following initial phases of the Site Groundwater RI Work Plan: 1) direct push investigation of the shallow alluvial aquifer immediately north of the Site; 2) instrument additional monitor wells with pressure transducers and data loggers and, three wells with probes to measure continuous electrical conductivity values; and 3) evaluation of the effectiveness of the pumpback well system.
- Continued Site wildlife surveys.

**Planned December 2008/January 2009 Activities**

- Continue routine O&M and site security activities, including the deterrence of birds from the Lined Evaporation Ponds and Pumpback Ponds. Flush PWS header pipes.
- Continue meteorological monitoring at AM-6.
- Continue groundwater elevation and pit lake level monitoring. Submit the 3Q 2008 Site-wide Groundwater Monitoring Report.
- Further discussions with EPA regarding the bottled water program.
- Upon receipt of EPA review comments, submit the updated version of the QAPP (Revision 4).
- Continue to compile and interpret field information and laboratory analytical data associated with the Anaconda Evaporation Ponds Removal Action Characterization Work Plan.
- Continue to work on the scope of work for field investigations associated with the initial phases of a revised Site-Wide Groundwater RI Work Plan.
- Revise the Background Soils Data Summary Report with metals concentrations corrected for soil moisture content and re-submit this document to EPA during 1Q 2009.
- Attend Yerington Public Meeting in January.
- As received, respond to EPA comments on previous submittals required under the Order and attached SOW (e.g., Process Areas RI and Draft Pit Lake RI Work Plans).

If you have any questions or comments, please feel free to contact me at (661) 287-3855 or via e-mail at [Roy.Thun@bp.com](mailto:Roy.Thun@bp.com).

Sincerely,



Roy Thun  
Environmental Business Manager

cc: Dave Seter, EPA – via electronic mail  
Mike Montgomery, EPA – via electronic mail  
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Andrew Helmlinger, EPA – via electronic mail  
Tom Dunkelman, EPA – via electronic mail  
Joe Sawyer, NDEP – via electronic mail  
Tom Olsen, BLM – via electronic mail  
Dan Newell, City of Yerington – via electronic mail  
Phyllis Hunewill, Lyon County Commissioner – via electronic mail  
Dennis Stark, Lyon County Manager – via electronic mail  
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